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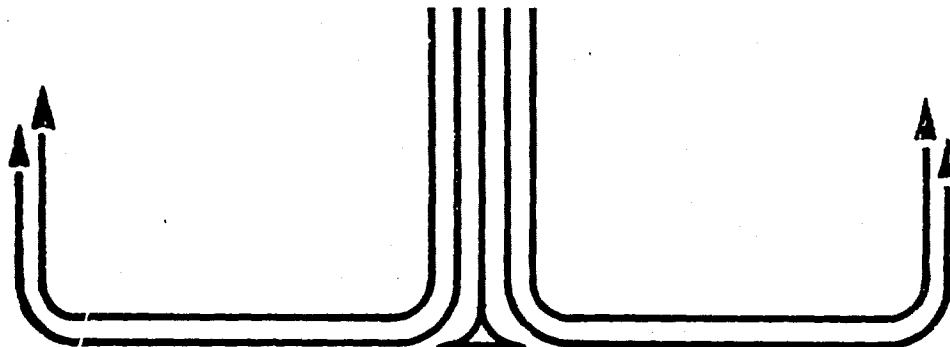
## STUDENT REPORT

CIVILIANIZING THE INSTRUCTOR  
FORCE: THE ISSUE LINGERS

Major Bruce C. Grant 88-1075

"insights into tomorrow"

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REPORT NUMBER 88-1075

**TITLE**

CIVILIANIZING THE INSTRUCTOR  
FORCE: THE ISSUE LINGERS

**AUTHOR(S)**

MAJOR BRUCE C. GRANT, USAF

**FACULTY ADVISOR**

MAJOR TOM VIEHE, ACSC/3822 STUS

**SPONSOR**

LIEUTENANT COLONEL DARRELL EASTON, ATC/XPXS

Submitted to the faculty in partial fulfillment of  
requirements for graduation.

AIR COMMAND AND STAFF COLLEGE  
AIR UNIVERSITY  
MAXWELL AFB, AL 36112

## REPORT DOCUMENTATION PAGE

Form Approved  
OMB No. 0704-0188

1a. REPORT SECURITY CLASSIFICATION Unclassified			1b. RESTRICTIVE MARKINGS		
2a. SECURITY CLASSIFICATION AUTHORITY			3. DISTRIBUTION / AVAILABILITY OF REPORT STATEMENT "A" Approved for public release; Distribution is unlimited.		
2b. DECLASSIFICATION / DOWNGRADING SCHEDULE					
4. PERFORMING ORGANIZATION REPORT NUMBER(S) 88-1075			5. MONITORING ORGANIZATION REPORT NUMBER(S)		
6a. NAME OF PERFORMING ORGANIZATION ACSC/EDC		6b. OFFICE SYMBOL (if applicable)		7a. NAME OF MONITORING ORGANIZATION	
6c. ADDRESS (City, State, and ZIP Code) Maxwell AFB, AL 36112-5542			7b. ADDRESS (City, State, and ZIP Code)		
8a. NAME OF FUNDING / SPONSORING ORGANIZATION		8b. OFFICE SYMBOL (if applicable)		9. PROCUREMENT INSTRUMENT IDENTIFICATION NUMBER	
8c. ADDRESS (City, State, and ZIP Code)			10. SOURCE OF FUNDING NUMBERS		
			PROGRAM ELEMENT NO.	PROJECT NO.	TASK NO.
11. TITLE (Include Security Classification) Civilianizing the Instructor Force: The Issue Lingers					
12. PERSONAL AUTHOR(S) Grant, Bruce C., Major, USAF					
13a. TYPE OF REPORT		13b. TIME COVERED FROM _____ TO _____		14. DATE OF REPORT (Year, Month, Day) 1988 April	
				15. PAGE COUNT 33	
16. SUPPLEMENTARY NOTATION					
17. COSATI CODES			18. SUBJECT TERMS (Continue on reverse if necessary and identify by block number)		
FIELD	GROUP	SUB-GROUP			
19. ABSTRACT (Continue on reverse if necessary and identify by block number) This project discusses the pros and cons associated with converting the Undergraduate Pilot Training Instructor force from a military supported to a civilian supported operation. Beyond the monetary aspect of this conversion, the report discusses several qualitative issues that must be addressed before a conversion decision is made. Issues such as the impact on training and standardization, program management, retention, combat readiness, and rated management are discussed. The study concludes that a decision of this magnitude must consider both qualitative as well as quantitative issues to render the best course of action. (Keywords: Air Force training; contract pilot training)					
20. DISTRIBUTION / AVAILABILITY OF ABSTRACT <input type="checkbox"/> UNCLASSIFIED/UNLIMITED <input checked="" type="checkbox"/> SAME AS RPT. <input type="checkbox"/> DTIC USERS			21. ABSTRACT SECURITY CLASSIFICATION Unclassified		
22a. NAME OF RESPONSIBLE INDIVIDUAL ACSC/EDC Maxwell AFB, AL 36112-5542			22b. TELEPHONE (Include Area Code) (205) 293-2867		22c. OFFICE SYMBOL

## PREFACE

It's a fact of life; budgetary restrictions and funding priorities will force us to continually look at cutting programs or exploring methods to administer those programs at a reduced cost. One popular method for reducing costs is to examine civilianizing a military function; to convert the labor force from a military to a civilian supported operation. Such is the case for the Undergraduate Pilot Training (UPT) instructor pilot force.

This program, traditionally dominated by military personnel, has repeatedly used civilian augmentation during times of national emergency or crisis. This past success in using civilians strengthens the position of those who champion the civilianization of the instructor pilot force. They argue that a civilian force offers significant cost savings through reduced personnel turnover or greater stability. However this position often discounts the conceivable lack of standardization, potential contractual labor disputes, the costs associated with obtaining and maintaining civilian aeronautical ratings, and the possible negative impact on retention. Only by acknowledging and thoroughly examining these qualitative issues can we fully appreciate the issues associated with converting the military instructor force to a civilian instructor force.

The Department of Defense (DOD), Air Staff, and Air Training Command (ATC) have studied and debated this issue several times in the past and will probably face this issue several times in the future. Consequently, it is important for our senior leaders to study and understand the complexities associated with this subject before committing to a position either favoring or opposing this transition. This research project attempts to highlight those topics; to give the reader a better appreciation of the qualitative and well as the quantitative issues.

The author wished to gratefully acknowledge the assistance of Lieutenant Colonel Darrell Easton, ATC/XPXS; and Mr. Joe Cox, ATC/ACCE, for providing major portions of the material used in this study. Their assistance and support was instrumental in completing this project.



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## ABOUT THE AUTHOR

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Major Grant, a graduate of the Reserve Officer Training Program, received a Bachelor of Arts Degree in Physical Education from San Diego State University in 1973. Upon entering active duty, Major Grant attended Undergraduate Pilot Training at Williams AFB, Arizona and received his wings in December 1974. Following initial pilot training, he completed Combat Crew Training in the B-52H before assuming flight duties at Grand Forks AFB, North Dakota. While assigned to the 319th Bombardment Wing at Grand Forks AFB, Major Grant held positions as Copilot, Wing Standardization Copilot, and Aircraft Commander. In January of 1980, Major Grant moved to Headquarters, United States Air Force in Washington, D.C. to participate in the Air Staff Training Program (ASTRA). During this tour, he served the Director of Operations (AF/XOO) in the Defense Suppression Division and the Director of Plans (AF/XOX) in the War Mobilization and Planning Division. Major Grant then returned to flying duties as a T-37 Instructor Pilot at Williams AFB, Arizona. While stationed at Williams, Major Grant served in the following positions: Assistant Flight Commander, Flight Commander, Chief of Check Section, and T-37 Standardization and Evaluation Chief. In June of 1984, Major Grant traded in his aircraft for a desk with the Deputy Chief of Staff/Personnel, Headquarters Air Training Command, Randolph AFB, Texas. Shortly after his arrival, he was selected to organize and staff a new Personnel Plans & Analysis Division (ATC/DPXL). This division built and used sophisticated computer models to analyze promotion and retention trends, conduct force aging studies, and predict force sustainability. This division also planned, procured and installed a sophisticated management information system incorporating over 100 computer terminals. During this headquarters tour, Major Grant also participated as a member of the Air Training Command Briefing Team. Major Grant has completed a master's degree in Business Administration, Squadron Officer School by correspondence and in residence, and Air Command and Staff College by seminar. Major Grant is currently a resident student at Air Command and Staff College, Maxwell AFB, Alabama.

Major Grant is married to the former Sharon [REDACTED] of Bakersfield, California. They have two sons; Ryan and Kyle.

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## EXECUTIVE SUMMARY

Part of our College mission is distribution of the students' problem solving products to DoD sponsors and other interested agencies to enhance insight into contemporary, defense related issues. While the College has accepted this product as meeting academic requirements for graduation, the views and opinions expressed or implied are solely those of the author and should not be construed as carrying official sanction.

—“insights into tomorrow”

### REPORT NUMBER

88-1075

### AUTHOR(S)

MAJOR BRUCE C. GRANT

### TITLE

CIVILIANIZING UNDERGRADUATE PILOT TRAINING:  
THE ISSUE LINGERS

I. Purpose: To examine the issues associated with civilianizing the Undergraduate Pilot Training instructor force.

II. Problem: Presently, the Air Force believes the military Instructor Pilot (IP) is an essential ingredient in all phases of the Air Force pilot training program -- a system designed to develop professional military officers as much as to provide skilled military pilots. However, other members of the Department of Defense (DOD), federal administrative agencies, and the Congress believe the Air Force should investigate converting this program to a civilian supported operation.

III. Data: Previous successes with using civilian instructors in the military pilot training program bolster the position of DOD, administration, and congressional members who favor converting our present force from a military to a civilian operation. This position is particularly evident during tense budgetary



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## CONTINUED

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deliberations aimed at reducing defense expenditures or funding new programs. Coupled with the fact that throughout the military establishment, several programs are converting or have converted to a civilian force, proponents of civilianization strongly contend that this option will reduce personnel costs through increased stability of the force.

Notwithstanding, this stability of the instructor force and the associated potential reduction in personnel costs only looks at this subject from a quantitative perspective and fails to address several qualitative issues. Notably, it does not address the potential impact on training quality and standardization of instruction. It also ignores the possible negative impact associated with work stoppage or strikes, and the conceivable negative effect on pilot retention. Unless the Air Force considers this issue from both a quantitative and qualitative perspective, a decision may be made which potentially jeopardizes the quality of the pilot training program as well as combat readiness and rated management.

IV. Conclusions: Today's pilot training program is designed to meet established standards for highly technical military weapon systems. It is also tailored to develop a corps of professional officers; officers who are dedicated to the defense of their country. Without this corps development, the Air Force might well embrace a company identity that resists commitment and dedication to the mission.

V. Recommendations: The United States Air Force and Air Training Command must prepare for the inevitable; pilot training will once again be screened for possible conversion to a civilian supported operation. The inevitability of this occasion dictates that we study the ramifications of our decisions. If dollars and cents are our main concern, then civilianization might be the choice of action. However, if we are concerned about maintaining and strengthening our institutional allegiance, then we should defend maintaining the military instructor force.

## Chapter One

### INTRODUCTION

Throughout the history of Undergraduate Pilot Training (UPT), pressures from within the Department of Defense, the United States Congress, and other federal administrative agencies have directed various studies to evaluate the feasibility of converting this training to a civilian contract operation. The purpose of this research project is to re-examine this debate and discuss the ramifications if the Air Force agreed to implement civilian supported training of its pilot force.

This paper explores this issue and the various internal and external pressures to convert military supported training to contract supported training using civilian instructors. First, it traces the use of civilian training to augment military training during times of crisis and identifies the reasoning behind reverting back to an all-military supported operation. Secondly, the paper examines several factors to consider before converting to a civilian operation in today's environment. Factors such as stability, training quality, labor relations, and retention are a few of the factors discussed. Finally the paper addresses the impact on combat readiness and rated force management before providing a summary and conclusion.

The logic of the paper is simple: the real issues surrounding civilian supported contract training are constant; it's a choice involving qualitative as well as quantitative elements. The pressure to continually examine the potential cost savings associated with civilianization addresses the issue strictly from a quantitative viewpoint and tends to ignore several qualitative factors.

Although the Chief of Staff recently declared that UPT would remain a totally "blue suit" operation, this issue will again be debated when rising pressures to trim defense spending or fund new acquisitions will challenge members of the Office of the Secretary of Defense, the Air Staff, the Congress of the United States, and other federal agencies to investigate contract supported pilot training as a potential cost reduction candidate.

This perpetual candidacy and the heated debate it fuels is illustrated by the comments of the following two gentlemen. Then Secretary of the Air Force, Hans Mark stated,

the military IP is an essential ingredient in all phases of the Air Force pilot training system--a system designed to develop professional military officers as much as to provide skilled military pilots. Adoption of a civilian alternative to the current system would degrade combat readiness and create severe problems for rated force management. Besides the loss of military identity in the program and impact upon training quality, a civilian alternative would create the potential for training disruptions associated with labor disputes. The most serious consequence would be the diversion of thousands of relatively inexpensive flying hours from military to civilian IPs--hours currently available to build experience for active Air Force Pilots. (10:1)

However, the issue remained unresolved when the Assistant Secretary of Defense, Robert Pirie, countered with the following statement.

I am not yet ready to conclude that it is essential that Air Force pilots be trained by military instructors. The arguments in favor of military essentiality certainly merit consideration. However, the potential benefits of using civilian instructors are too great for me to completely dismiss the possibility. (11:1)

As these two quotes indicate, the issue is marked with diametrically opposed opinions. It's an issue which will continually challenge the Air Force, and specifically Air Training Command (ATC) to justify keeping UPT as a military supported operation. The in-baskets of action officers at ATC Headquarters and the Air Staff will continually be full of information concerning this issue. This report is yet another look at the issue. This author has spent the last seven years looking at the issue from the vantage point of an instructor pilot, flight commander, squadron supervisor, flight examiner, and headquarters staff officer. Not unexpectedly, the issues have remained the same and the arguments continually follow the same logic. It all boils down to a disagreement over how much is it, in dollars, to rely on military instructors to train young pilots, to provide a ready reserve force, and to help the Air Force manage its rated force. Those who support conversion to a civilian supported operation continue to disregard several important issues which must be addressed and resolved.

With the complexities of today's training environment, we must examine all the questions, rather than looking at this issue strictly from a dollars and cents point of view. To do so might cause serious setbacks which might jeopardize the combat readiness posture of the Air Force and the health of the rated force.

## Chapter 2

### THE HISTORY OF CONTRACT PILOT TRAINING

Contract pilot training is not a new idea. In fact, the Army Air Force and the United States Air Force have resorted to this method of training several times throughout their short history. This chapter will provide a brief history of our use of this training concept, concentrating on the reasons for implementing contract training, eliminating its use, and current pressures to reinstate this form of training.

The Army Signal Corps initially used this training method in 1910 with the Wright Brothers at Maxwell Air Force Base, Alabama. However, the first large-scale use of this approach dates back to 1939. At that time, General H.H. "Hap" Arnold, Chief of the Army Air Forces, directed its use because of our anticipated participation in World War II. (12:27) The existing Army Air Force pilot population was not large enough to sustain operational commitments and the training surge anticipated with the war build-up. Consequently, contract training was established at eight locations to conduct initial pilot training operations and produce 1750 pilots each year from 1939 to 1941. (12:27) The system, however, lacked the facilities to produce the numbers of pilots needed to maintain the requirements of a dual front war which the United States found itself in following Pearl Harbor. As a result, the system grew to 56 schools which eventually produced an annual production of 90,000 pilots per year throughout the peak years of the war. (12:27)

As the war drew to a close in 1945, contract supported pilot training was gradually reduced commensurate with reduced pilot production requirements. In fact, when the peace treaty was signed in 1945, only two contract supported pilot training operations were still operating and they too closed before the end of the year. (12:27)

This experience with contracted supported training left military leaders with dissimilar opinions about its worth. Brigadier General W.W. Welech of the Eastern Flying Training Command thought that contract operations were "perfectly splendid". (12:27) However, Major General W.R. Weaver of the Southeastern Flying Training Command said that "all they (contractors) did was collect the money." (12:27) Recognizing this divergent opinion, the civilian contractors formed the Aeronautical Training Society to defend keeping portions of the pilot training program as a contract sponsored operation. (12:27)

The heated debate over the issue of "military" versus "civilian" supported pilot training was eventually addressed in a major research report conducted by the Stanford Research Institute. This study recommended that considerable cost savings could potentially be realized by converting the entire program to a civilian contract operation vice continuing with part military/part civilian operations. (12:27) Anticipating being tasked to implement the report's recommendation, Air Training Command developed a plan to implement the Stanford Study recommendations if tasked to do so by the Air Staff. (12:27)

The plan was eventually implemented in 1950 to support the increase in pilot production requirements associated with United States commitments with the Korean Conflict. Nine schools were operating by the beginning of January 1952, (12:27) and for the three years that followed, these nine schools produced 7,200 pilots annually in support of our Korean obligations. (12:27) By the end of the conflict, contract operations were firmly entrenched and it seemed unlikely that we would ever revert back to a totally military supported operation. (12:27)

That's exactly what happened during the time from the end of the Korean Conflict until 1958. During the latter part of 1958, however, discussions between the Chief of Staff, USAF and the Commander of Air Training Command once again raised the question about the relative worth of contracted supported pilot training. A Pentagon study was commissioned to investigate the future of contract flight instruction. The study group eventually recommended that flight instruction revert to a military only supported operation. (12:28) This recommendation was based on the following six reasons:

1. Flying time for civilian instructors was valuable flight time lost to the Air Force for gaining experience.
  2. The military atmosphere gained by placing students under military supervision is an immeasurable gain.
  3. Contract operations are subject to industrial relation problems.
  4. Contract operations reduced the military cadre available for national emergencies.
  5. Contract operations reduce military control of pilot training.
  6. Contract operations reduce flexibility of training.
- (9:9)

These six reasons convinced the Chief of Staff to discontinue contract supported operations in 1960. Coupled with the decreased pilot training rates and a major restructuring of

the pilot training program (conversion from a dual track to a generalized syllabus), the entire pilot training complex was reduced from 12 (6 civilian and 6 military) to 7 (all military) bases supporting Undergraduate Pilot Training. (12:28)

This setting continued until civilian contract operations were partially resumed in 1965 to support the Flight Screening Program (FSP). This program, designed to evaluate pilot training candidates prior to entering the program at each of the seven main pilot training bases, uses the T-41; a plane similar to the civilian Cessna 172. Due to the dissimilar airspeeds at which this aircraft performed as compared to other UPT aircraft, Air Force officials elected to conduct this operation at local civilian airports. The similarity of the T-41 to its Cessna 172 counterpart and the basic nature of the tasks taught made this operation particularly tailored to a civilian supported operation. (12:28)

This tailored operation continues today with one exception. Rather than operating a screening program close to each pilot training base, the program has been consolidated at Hondo Field, Texas. Its mission remains to screen pilot training candidates who did not participate in the Pilot Indoctrination Program (FIP) while undergraduate university students at their Reserve Officer Training Corps (ROTC) detachment. Air Force Academy graduates do not participate in this program since they complete a similar program during their senior year at the academy.

Although contract operations continue to support the Flight Screening Program and jet instruction remains a military operation at our pilot training bases, the advent of the all-volunteer force and the cost of major acquisition programs is forcing the Air Force, the Office of the Secretary of Defense (OSD), and Congress to once again look for programs which could be converted to civilian contract operations at a savings to the Air Force. Taking the lead in this search, OSD tasked the Air Staff to determine if all aspects of the pilot training operation must be supported with military instructors. (6:221) At the conclusion of the study, the Air Staff recommended that only flight screening operations remain under civilian contract and that jet operations remain under military support due to the military essentiality of the pilot training force.

This label of military essentiality states that the military pilot training instructor performs an important role model function in addition to teaching "military" pilot skills. Since the majority of our pilot training student were either ROTC or Officer Training School (OTS) graduates, the Air Force felt it important for pilot candidates to remain under the constant supervision of another military officer during the entire jet pilot training program. This "bluing process" is considered to be an integral part of the overall conversion process from a civilian to military mindset. (12:x)

Pressure once again came to bear when the Navy submitted to budgetary pressures and elected to experiment with contract instructors to support certain portions of their pilot training program. Approximately 180 civilian instructors were employed to augment the academic, simulator, and primary instrument phases of instruction. This Navy experiment bolstered the OSD position that certain portions, if not all portions, of the pilot training program could be economically more efficient with civilian rather than military supported instruction. (12:30) However, the 1980 presidential election brought a new pro-defense administration to power as well as a new OSD staff. Rather than render a decision soon after taking office, the new OSD staff elected to take the time necessary to completely study this and other issues prior to making any decisions.

The decision never came forth, but in 1986, Mr. Kring, OSD's Director for Test and Evaluation, attempted to target pilot training for conversion to civilian supported operation. Feeling restored Congressional pressure to reduce defense spending, Mr. Kring speaking to Jane's Derense Weekly, stated "that Congress had directed the Department of Defense to reduce its overall officer strength as a way to trim the defense budget." (3:1309) He went on to say that "OSD was looking to compensate this strength reduction by reducing the number officers supporting aircrew training," (3:1309) and "that initial pilot training does not have to rest with military instructors; industry can do the job instead." (3:1309)

Renewed congressional pressure to reduce the overall federal budget will continue to force OSD and other federal agencies to explore program reduction options (3:1309). Within OSD, this usually means investigating those programs which could be supported with a civilian workforce versus the military workforce that currently operates that particular program. Current congressional mandates regarding officer strength reductions will obviously lead OSD to investigate if not target those program with officer intensive populations (3:1309).

Pilot training is one of those programs. With a population composed of 75 per cent officers, (9:11) conversion of this program to a civilian instructor force would dramatically help OSD reduce the officers necessary to comply with the officer strength reduction mandate. Whether this would translate into a cost savings and a more efficient mode of operation remains to be seen. Several questions need to be answered regarding the composition of this new force, including the available labor pool to hire from, civilian requirements for instructor ratings, the cost of obtaining these ratings, the possibility of labor disputes and their disruptive effects, how to standardize and control a civilian program, force stability, and the impact on retention. But until the Air Force resolves these questions to the satisfaction of OSD, pressure will continue to target the military instructor cadre in pilot training as a possible candidate to satisfy officer strength reductions.

The following chapter will examine these questions that the Air Force and Air Training Command must consider in order to either defend retaining an all military instructor force or to recommend converting to a civilian/contract type of operation.



## Chapter Three

### PROBLEMS WITH THE CIVILIAN ALTERNATIVE

Converting today's "blue suit" instructor pilot force to an all civilian force would present some unique challenges. Before making a decision to convert from a military to a civilian operation, serious questions involving composition of the civilian force, civilian ratings and their associated costs, leveling training to acquaint the civilian with the military flying environment, possible labor disputes, force stability, training quality and standardization, program management, and the impact on retention would have to be answered. This chapter explores these questions; it describes the potential problems each of these areas would supply.

If the Air Force (AF) elected to convert to a contract supported pilot training operation, normally the first decision to be made is whether this force would be composed of contract civilians, inservice civilians, or a combination thereof as exists in the Army's Undergraduate Helicopter Training program (UHT) today.

The civilian force which currently augments the military instructor nucleus at Ft Rucker is composed of 380 civilians supporting the program of which 300 belong to a private contract and the remainder being inservice civilians. The total civilian force comprises approximately 50 per cent of the total instructor force. Dissecting the civilian portion of this force shows over 60 per cent being former military members now in retired status. The remaining 40 per cent of the civilian population are prior service members who have separated from the service and now are members of a National Guard or an Army Reserve Unit in the area. (12:31) The majority of both groups (60 percent) are ex-warrant officers who enjoy the appeal of helicopter operations and specifically the Army helicopter training program. Recognizing that helicopter skills are not in demand in the civilian sector, the majority of these pilots elect to remain in the Ft Rucker area and support the helicopter training program. (12:31)

Unlike their army counterparts, pilots exiting the Air Force possess marketable flying skills which are in great demand in the commercial sector. (7:2) Looking at a cross section of the military delegation employed by the major airlines today, 58 percent are former Air Force pilots. The same cross section reveals only three percent being former Army pilots. (2:11) This statistic indicates that the monetary appeal of the

commercial airlines would, more than likely, far outweigh the appeal of working for a civilian UPT contractor. In addition to the lure of the commercial airlines, retention studies continually highlight the fact that ex-Air Force pilots prefer to use their master's level education to land high paying jobs in the civilian management sector. (7:2)

With the dominant attraction of the commercial airlines and corporate management market, a civilian managed AF pilot training program would probably include both instructors with and without military flying experience. Hiring non-military experienced pilots may be necessary to employ the force size necessary to meet production requirements. Consequently, questions must be addressed regarding what type of qualification training is necessary to qualify as a civilian instructor pilot and what leveling training would be necessary to qualify a non-military experienced pilot to instruct in a military jet aircraft environment.

All civilians participating in any aviation activity are governed by Federal Aviation Administration regulations. (5:3) These regulations specify the ratings, courses of instruction, and medical certificates required to participate at various echelons within the aviation field. To avoid extensive initial training costs, a commercial operator would, obviously, attempt to hire pilots with extensive instructional experience in both basic and instrument flying. It would be advantageous to hire pilots already possessing a Certified Flight Instructor/ Instruments (CFII) rating. Referencing Federal Aviation regulations, a CFII must possess a commercial license and have successfully completed the CFI rating, CFI certification course, and the CFI instruments course. The CFI certification includes 100 hours of ground training plus 190 hours of flight instruction. (1:12) The CFI certification course requires an additional 45 hours of ground instruction and 20 hours of flight instruction. (1:12) Finally, to add the instrument flight instructor rating, the CFII candidate must complete 20 supplementary hours of ground and flight instrument instruction. (1:23) All totaled, the CFII recipient completes 165 hours of ground instruction and 230 hours of flight instruction. (1:23)

According to the Future Airline Pilot's Association (FAPA) special report, "Beginners Guide to Becoming a Career Pilot," the average total cost and time associated with gaining the CFII credentials is \$47,000 and 18 months. (1:23) This cost reflects instructional fees only and does not include aircraft rental fees (aircraft rental fees are not published due to the vast numbers of civilian aircraft). If a civilian contractor were to hire a totally inexperienced force comparable in size to the current instructor pilot force, an initial investment of approximately 94 million dollars would be required to pay the instructional costs to obtain CFII ratings for the entire force. Consequently, a civilian contractor would drastically reduce start-up costs by hiring pilots possessing the CFII rating.

But even with this certification, the CFII recipient is restricted to the aircraft he/she received their instruction in. To instruct in UPT aircraft, the CFII would then have to complete additional transition training. Specifically, time would have to be devoted to master the peculiarities of the military flying environment; its increased speeds and required reflexes, not to mention the atmosphere associated with the helmet, oxygen mask, ejection seat, and flying with a stick instead of a yoke. Advanced instruction in contact (acrobatic, stalls, and post-stall recoveries), formation, and instrument flying would be required to qualify the civilian instructor to perform successfully in the high stress military flying environment.

The AF currently spends \$80,000 (total costs) to train each graduate of our the Pilot Instructor Training (PIT) course. (8:1) However, this cost is valid only for graduates of the UPT syllabus. The 200 hours of previous instruction and experience in the T-37 and T-38 aircraft provides a firm foundation upon which to build instructor proficiency. (12:18) The 200 hours of UPT instruction currently costs \$440,000 per graduate. (8:1)

The civilian counterpart without previous UPT experience would, most likely, require a proportionate amount of additional instruction to attain a comparable level of proficiency equal to the UPT graduate. The amount of leveling training naturally would be pure conjecture at this point. Although this leveling training would be required for virtually all civilian instructors entering the Undergraduate Pilot Training (UPT) arena, the least expensive case would involve a recent UPT instructor who elected to separate from the service and immediately obtain work with a civilian contractor. The most expensive case, conversely, would involve the individual without military flying experience. (9:13) This training requirement is a major concern in the scenario involving conversion to a civilian instructor force, but other concerns include labor disputes, force stability, training quality, program management, and retention impact.

In the civilian market, labor disputes are always a concern to contend with. (12:34) Strikes and work slowdowns could potentially have adverse impacts on pilot production requirements. Consequently, the Air Force would have to negotiate, if at all possible, contracts containing "no work stoppage" clauses. The current trend in civilian contracts, however, is to ignore these clauses or to remove them from contracts containing that language. (12:34) Therefore, finding a contractor who would honor this type of clause is questionable if not impossible.

The question then becomes, what would the Air Force do if a UPT contractor decided to strike. Would the Air Force be able to supply the necessary manpower from other commands to continue the UPT operation without affecting the operational mission of the supporting commands? Assuming the current force of 2000

instructors remains constant, even a 50 per cent civilian force would require other major commands to furnish 1000 temporary instructors in the case of a mass walkout. The associated mission degradation to the operational commands would possibly be more than mission readiness standards could comfortably sustain, not to mention the time (months) it would take to requalify them following the return to their parent command. (12:35)

Force stability is a characteristic that proponents of contract training tout. Throughout the history of UPT operations, ATC has sustained a 2 per cent turnover of instructor pilot personnel per month. (4:3) However, a recent civilian stability study recently revealed a 3 percent per month turnover rate for individuals employed in flight related operations. (12:35) Furthermore, DOD regulations require all contracts to undergo formal cost comparisons every five years. If a new contractor underbids the current contractor, then the entire operation would transfer to the new contractor. This potential entire work force conversion would be extremely expensive and suggests that personnel costs could be much higher than often thought in a civilian workforce. The thought that military supported operations is inherently more expensive because of the standard three year military move cycle is becoming more of a myth when compared to current civilian turnover rates. (12:36)

Training quality is another consideration to contend with in a contract operation. The complexity of the UPT training syllabus would make it virtually impossible to write a training philosophy into a contract. The sheer size of the UPT program would also make training standardization almost impossible since few contractors would want to enter a contractual obligation for the entire UPT program. Consequently, the Air Force could be tasked with coordinating and standardizing the efforts of several contractors. Another training quality concern would be the ability of the civilian instructor force to instill military values. This potential credibility gap would compound the problem of transferring whys and wherefores of military pilot skills -- skills such as formation; high-speed, low altitude navigation; mission planning; verbal and visual communications, etc. The resultant loss in graduate quality would then become the task of the gaining command to rectify during the more expensive graduate training in a specific weapon system. (12:36)

Program management would be another concern to deal with under the civilian scenario. Without military instructors from the major commands, ATC would lose operationally experienced pilots and their valuable feedback regarding program changes to correct identified deficiencies in training. This constant evaluation of the syllabus is a valuable tool that insures training remains appropriate and effective. In a civilian instructor environment, ATC would lose this expertise to evaluate course revisions or implement major command requirements. Critical changes to the syllabus, furthermore, could endure lengthy delays due to contract negotiations.

Lastly, civilian instructors could potentially cause future retention problems. A great deal of an officer's career intent is formed during the early years of commissioned service. (7:1) The exposure of young officers to civilian instructors could surreptitiously block the formulation of a positive attitude towards a military career. Contrasting life styles, stable versus nomadic existence, pay and benefit differences, and the lack of a military commitment may erode a student's interest in making the Air Force a way of life. This situation could be exacerbated by the situation of a civilian IP who was rehired after a forced separation from the Air Force. This scenario possess the potential for a student to be exposed to a daily diet of discouragement and bad feelings.

Even though the civilian alternative may initially look appealing, the Air Force must weigh all the factors before making a decision to convert to a civilian instructor force. The old adage, "it not as easy as it seems," seems very appropriate when considering implementing the civilian alternative. Labor disputes, force stability, training quality, program management, and retention are just a few of the issues that will need to be considered. Additionally, the AF needs to consider the impact on combat readiness and rated management before making a decision to civilianize the UPT instructor force. The following chapters will discuss the potential effects civilianization would have on combat readiness and rated management

## Chapter 4

### CIVILIANIZATION AND ITS IMPACT ON COMBAT READINESS

The current ATC Instructor Pilot (IP) force numbers approximately 2000 members. (6:21) A snapshot at the force today reveals a rough breakdown of 1200 First Assignment Instructor Pilots (FAIPs) and 800 prior service pilots from other major weapon systems. (6:23) On the average, each FAIP accumulates roughly 350 flying hours each year, and each major weapon system (MWS) instructor pilot accumulates roughly 250 flying hours each year. (6:24) This difference in accrued flying time is due to the more senior major weapon system pilots occupying intermediate level supervisory positions in the typical training squadron and the associated supervisory responsibilities that go with those positions. However, regardless of the category (FAIP or MWS), ATC IPs accumulate somewhere between 1000 and 1200 during the normal IP tour. This valuable flying experience creates tremendous benefits to the Air Force downstream when the IP transfers into a major weapon system.

The major benefit to the gaining major weapon system command is the reduced time necessary to gain experienced status. (12:47) The commonality of basic flying skills transfer readily from one airplane to another, consequently the gaining organization benefits through increased experienced ratios and reduced training costs. An example is the B-52 pilot who needs 1300 total flying hours and 300 B-52 hours to be classified as experienced. (12:45) At approximately 300 flying hours per year, this equates to 4.3 years for the average UPT student going directly to the B-52 versus 1.5 years for the FAIP (with 1000 hours flying time) transferring to the the B-52 following his ATC tour. (12:46)

This time to experience directly affects the experience level of the unit. By definition, this experience level is nothing more than the number of experienced pilots assigned to a unit divided by the total number of pilots assigned to a unit. This percentage, governed by command-level regulation, is the minimum experience level that major commands require a squadron to possess in order to perform its mission in a competent manner. Using today's standards, a typical B-52 squadron must maintain a 40 percent experience level, or stated differently, 2 out of every 5 pilots must be experienced. (12:46)

If we were to civilianize the ATC instructor pilot force, we not only would see a drop in this experience level, but we would also dramatically drive up the training costs associated with achieving experienced standards. (12:46) If the decision were made today to convert to a civilian UPT instructor force, we would eliminate 400 FAIPs entering major weapon systems each year (1200 FAIPs/3 years). (12:46) If the B-52 portion of those MWS entries equated to 50 pilots per year, it would take 215 man years (50 pilots x 4.3 years to experience) to reach experience standards for each years entry group. Conversely, with the 50 entries coming from FAIP tours, it would only take 75 man years (50 x 1.5 years to experience) to experience the same number of pilots. This dramatic reduction in flying time and subsequent flying costs, represents a tremendous cost savings to the Air Force and a tremendous increase in the experienced pilot population.

Another consideration is the inability of a civilian instructor force to augment combat forces in time of war to meet surge requirements. (12:x) Again, using today's snapshot, the MWS portion of the instructor pilot force represents 800 pilots who could quickly return to their former weapon system in time of national crisis. This cadre of experience pilots can often regain currency in their former weapon system in minimum time and often directly with the combat unit rather than returning to the graduate level training unit (CCTS or RTU). (12:47) Without this buffer, the only method to meet a national crisis would be to increase UPT production. Unfortunately, this alternative simply pushes the problem downstream since the graduate training program would have to surge in order to upgrade the UPT graduate. This would potentially require additional major weapon systems to be dedicated to training units rather than to combat units.

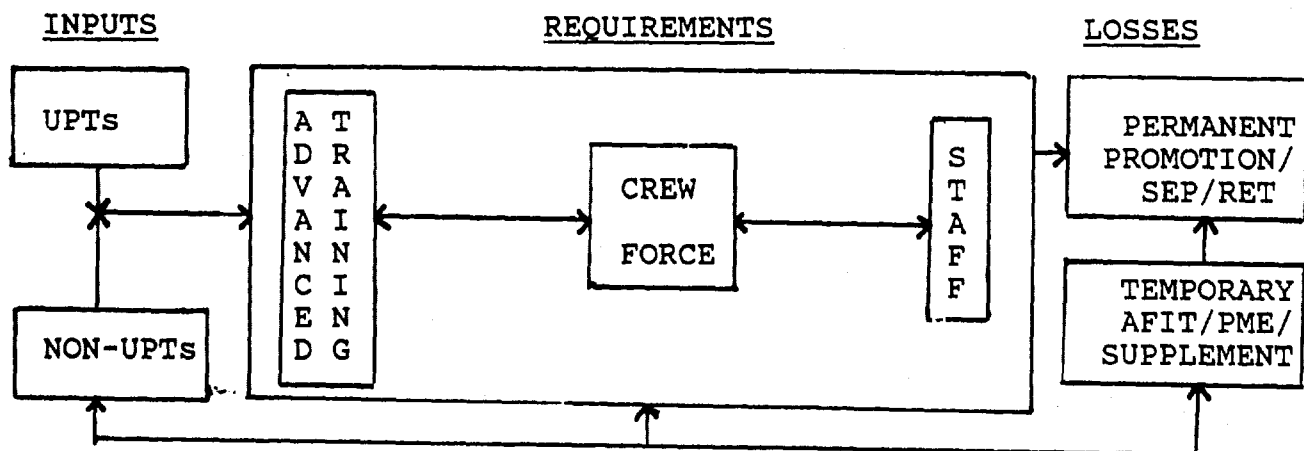
## Chapter 5

### CIVILIANIZATION AND ITS IMPACT ON RATED MANAGEMENT

The constantly changing requirements and composition of the rated force demand constant management attention of the approximately 24,000 members who comprise this segment of the officer corps. Several internal and external forces; including training, promotions, rated supplement tours, staff requirements, AFIT and PME assignments, separations and retirements constantly pull and push on this force, challenging rated force managers to cautiously perform minor surgery to cure whatever the current ailment happens to be. This chapter examines the impact on rated force management if the AF converted its UPT instructor force to a civilian supported operation.

A brief inspection of the Rated Management Model will help us understand the sensitivities of this force. This model, shown in Figure 5-1, is characterized by continual movement among the categories labeled inputs, requirements, and losses. This dynamic flow requires constant attention to insure requirements are balanced by inputs versus losses. (12:43) If either of these elements get out of hand, the force is either characterized by an insufficient number of pilots to meet mission requirements or insufficient number of cockpits to age pilots to minimum experienced standards. It is this sensitivity which demands constant attention and supervision; the system doesn't have the ability to effortlessly absorb minor fluctuations. (12:47) Each and every minor pulse in the system potentially triggers major unbalances downstream.

Figure 5-1  
THE RATED MANAGEMENT MODEL

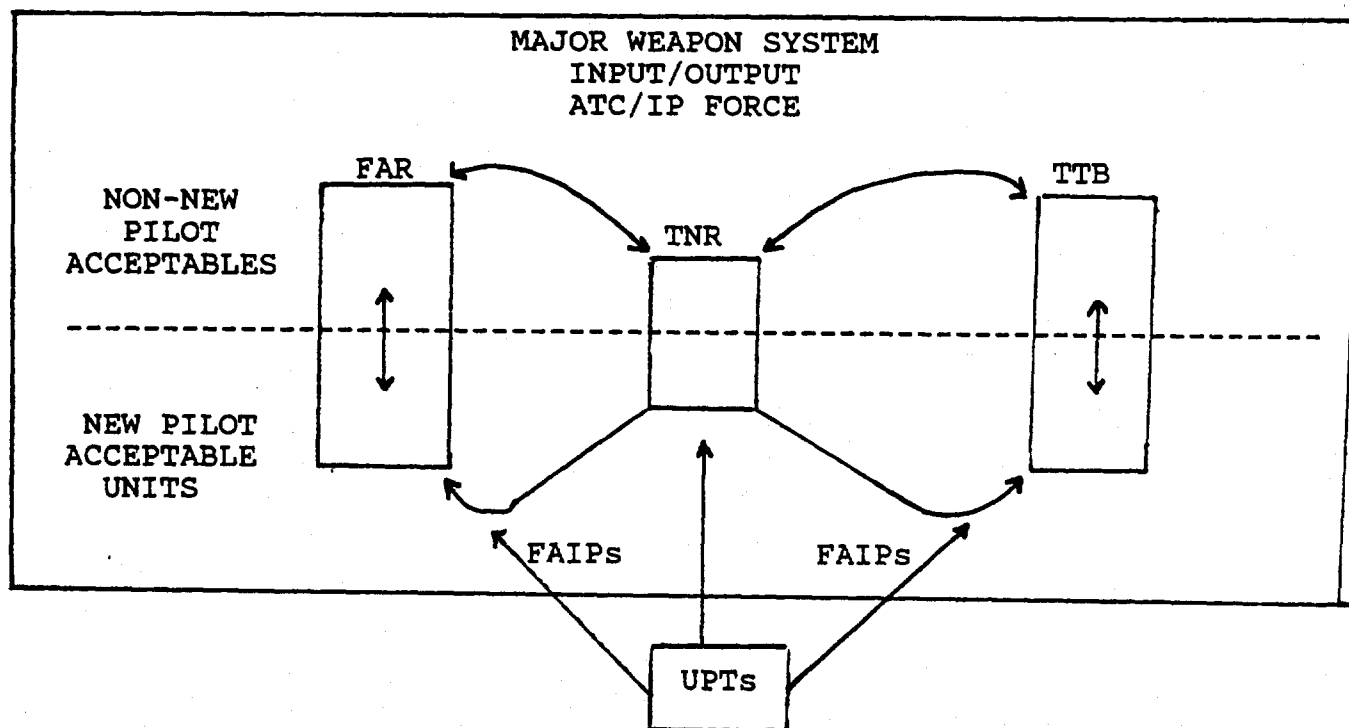




Taking a closer view of the input section of this model, we note that the input to the requirements section is divided into two sections: Undergraduate Pilot Trainees (UPTs) and non-UPTs. This second category includes experienced pilots who fall into one of two categories: those entering a major weapon system for the first time or have been out of a former system for several years and require requalification training. (12:44) Either category, however, is a bonus to the Air Force since they require less requalification training due to previous flying experience. First Assignment Instructor Pilots (FAIPs) fall into this category.

A further breakdown of the requirements section is shown Figure 5-2. This section separates the operational force requirements into two primary components: Fighter-Attack-Reconnaissance (FAR), and Tanker-Transport-Bomber (TTB). The input requirements into these categories along with the minimum experience standards, mentioned in the previous chapter, which dictate the overall production rate for UPT and the number of FAIPs entering major weapon system training each year. The system becomes a delicate balancing act involving stability, a measure of the turnover rate within a system or specific aircraft maintaining prescribed experienced standards. The FAIPs become a shock absorber to manage minor fluctuations in operational requirements; it's a ready reserve account of experienced pilots.

Figure 5-2  
ACTIVE PILOT FORCE REQUIREMENTS (FAR, TNR, TTB)  
(not to scale)



Since experience standards are based on total flight time and time in the primary assigned aircraft (PAA), FAIPs require only about half the time as UPTs to experience in fighter aircraft and about one third the time to experience as UPTs in multi-engine systems. (12:47) Without the military IP force feeding into fighter and multi-engine major weapon systems, operational commands would have to fund additional expensive flying hours to experience their pilots. This would detain rated officers at the unit level in order to attain experienced ratings. It would also limit their opportunity to fill staff jobs requiring rated expertise and participate in career broadening assignments. The flight experienced FAIP, therefore, provides increased flexibility to the rated management system since they attain experienced standards quicker; providing a broader base of rated offices to fill staff positions and participate in career broadening programs. (12:47)

Another impact of eliminating FAIPs from the input section of the rated management model is the impact on the advanced training courses. Additional flying hours would have to be programmed into the budget to handle the the less experienced pilot force entering major weapon system training. This would also require additional operational resources (pilots and weapon systems) to be diverted to the the school house to handle the increased training requirements.

No matter how you address the issue, removing the FAIP population from the rated management model eliminates a great deal of flexibility in the system and presents rated management with several problems. First, experience standards would drop immediately and take longer to recover since pilots would take longer to attain experienced standards. Second, pilots would remain at the unit level longer to attain experience standards and consequently restrict their opportunities for staff and career broadening opportunities. Third, various command level functions will go without rated expertise to maintain experienced standards at the unit level. And finally, critical resources will be diverted to the school house to handle the increased training requirements with a less experienced force entering advanced training. This loss in flexibility would potentially create monumental problems for rated force managers and the rated force.

## Chapter 6

### SUMMARY AND CONCLUSIONS

This paper examines several issues associated with converting the current military IP force to a civilian contract supported operation. In today's environment of constrained military budgets and increasing acquisition costs, this officer rich field has come under close scrutiny several times for possible conversion to contract operations. Those who support converting this program to a civilian operation, often cite our past experience with contract supported training, the success with civilians supporting the Army's flight instruction program, the recent Navy experiment with partial civilian instructor force, and the decreased costs associated with theoretical more stable force.

Where the critics fall short, however, is in several qualitative issues such as training quality, standardization, retention, qualification training of the civilian force, work stoppage, and retention. These qualitative concerns make this issue extremely more complicated than just a dollar and cents comparison. Today's Air Force UPT program is tailored to meet established standards for highly technical military weapon systems. It is also tailored to develop a corps of highly professional young officers -- officers who are fully aware of their chosen profession. (12:x) Air Force UPT does more than just train people to be pilots; it orients young officers to the AF, develops them militarily, and provides them with the technical skills required to be a military pilot. (12:x)

This training to become a military pilot includes several unique situations not common to the civilian flying world. The cockpit, the mask, the parachute, the ejection seat, and the unique military flying maneuvers make this environment totally different from its civilian counterpart. It's a program which demands a great deal of its students, instructors, and managers. Crucial habit patterns, military unique flying skills, and a positive career orientation mindset are important products of UPT training. It is therefore the military mission of the UPT program which forms the basis for the current requirement that the instructor force be military members. To insure the full accomplishment of the UPT charter, the people who conduct and manage the program must match the need. This is the prime consideration in the military essentiality issue.

But the issue doesn't stop here. Any conclusion must also address the impact to rated management and combat readiness. Both areas present major problems under the civilian alternative. A civilian force would likely include instructors without military flying experience. Such individuals would have serious deficiencies with respect to military jet flying training. Additionally, potential labor disputes, lack of standardization, and potential loss of training quality raise serious concerns about the civilian alternative.

The instructor pilots in the UPT world exist to develop officer values as well as train military pilots. The future of AF rated management and combat readiness depends on the products, both UPT graduates and FAIPs. This system, and the philosophy behind it, and the rated force as a whole all require that the instructor force match the need.

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